APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,431	02/11/2002	Seh M. Ryu	DOMI/502US	4475

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EXAMINER
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ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/073,431	RYU ET AL.
	Examiner	Art Unit
	Blaine Basom	2173

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-7</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-7</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>11 February 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 1

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1, and claims 2-7 which depend therefrom, each recite a method that displays a hierarchy. However, there is no suggestion that such a method is tangibly-embodied, and therefore, claims 1-7 are considered to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Claim 1 recites a user interface method, but does not recite any steps associated with this method. Also in claim 1, there is no antecedent basis for "the attributes." In claim 3, there is no antecedent basis for "the primary hierarchy." Regarding

claim 4, the phrase, "i.e. the user has not applied values to directly to members," renders the

claim indefinite, as it does not adequately set forth the metes and bounds of the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 3, 4, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,760,721, which is attributed to Chasen et al. (and hereafter referred to as "Chasen").

Regarding claim 1, Chasen describes a method for organizing and managing metadata, i.e.

information about data, such as the artist, album, or genre regarding a music track (for example,

see column 1, lines 5-50). Chasen particularly teaches organizing such metadata via a hierarchy,

which may comprise a plurality of levels, and whereby the user may add, change, or delete

metadata using a user interface displaying the hierarchy (for example, see column 1, lines 39-62;

and column 4, lines 27-37). Chasen is consequently considered to teach a user interface method

that displays a hierarchy of an attribute, specifically metadata, in a tree format for the purpose of

applying values to objects, such as music tracks, which are represented by members of the

attribute in the hierarchy.

Specifically regarding claim 2, Chasen discloses that this metadata may comprise

information such as the track name, artist, album, genre, CD track number, length, format,

quality, comments, date and/or time last played, date and/or time the track was created, file size,

file location, and protection flag related to each musical track (see column 9, lines 30-42). It is

thus understood that the metadata may comprise a plurality of data types, and therefore, the user

may apply more than one type of value to objects, i.e. musical tracks, represented by members of

the hierarchy.

As per claims 3 and 7, Chasen discloses that the metadata may be hierarchically

organized in a plurality of ways, resulting in a plurality of different attribute hierarchies (see

column 10, line 57 – column 13, line 9). Chasen further discloses that these hierarchies may be

incorporated into a single "master" hierarchy (see column 7, lines 32-42; and column 13, lines 9-

44). This "master" hierarchy is considered a "virtual" hierarchy, like recited in claim 3, and

therefore, Chasen is considered to teach that objects represented by more than one attribute

hierarchy may be incorporated into one virtual hierarchy by inserting other attribute hierarchies

into the virtual hierarchy to create one virtual hierarchy. Moreover it is understood that, in this

virtual hierarchy, inserted attributes carry only those members that belong to the hierarchical

position that the attribute is inserted (for example, see the hierarchy displayed in columns 13 and

14; the inserted attribute, for example the "artist" attribute, links only to the tracks that belong to

the hierarchical position that this attribute is inserted).

With respect to claim 4, Chasen discloses that the user may modify a node within the

above-described hierarchy, such as changing a node having a value of "Pop" to "Rock," for

example (see column 4, line 65 – column 5, line 6). In response, all the nodes hierarchically

organized under the changed node are modified to reflect the changed value (see column 4, line

65 – column 5, line 6). It is further understood that the user may designate "rebel" members, like

defined in claim 4, by similarly changing the value of a node further down the hierarchy.

Consequently, Chasen is considered to teach that values applied to objects represented by a

higher hierarchy member in a tree are applied further on down the tree only to objects

represented by members that are neither rebels, i.e. members to which the user has directly

applied values, nor direct descendants of rebels.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent of

Chasen, which is described above, and also over the teachings of Microsoft Office 97, as

described by Moseley and Boodey in the book entitled, "Mastering Microsoft Office 97,

Professional Edition." As described above, Chasen teaches a method like that recited in claim 1,

whereby a user interface displays the hierarchy of an attribute in a tree format for the purpose of

applying values to objects represented in the hierarchy. Chasen discloses that the user may

modify a node within the hierarchy, such as changing a node having a value of "Pop" to "Rock,"

for example (see column 4, line 65 – column 5, line 6). However, Chasen does not explicitly

disclose that the user's application of values to a node may be cancelled, as is expressed in claim

5.

Microsoft Office comprises a plurality of programs, such as "Word," "Excel,"

"PowerPoint," "Outlook," and "Access," with which the user may enter data, such as to create or

modify documents, spreadsheets, email, etc. (for example, see pages 5-12). Regarding the

claimed invention, Moseley and Boodey disclose that each of these programs presents an "undo"

option to the user, such as via an icon in the display or via a menu, whereby this undo option

may be selected to cancel the user's application of data in each of these programs (for example,

see pages 94, 149, 432, 762-763, 885, 862-863, and 1126).

It would have been obvious to one of ordinary skill in the art, having the teachings of

Chasen and Office 97 before him at the time the invention was made, to modify the method

taught by Chasen to include the feature of canceling a user's application of values, like taught by

Office 97, particularly to a member in a tree. It would have been advantageous to one of

ordinary skill to utilize this combination because such a feature allows the user to quickly

recover from input errors, as is taught by Office 97.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent of

Chasen, which is described above, and also over U.S. Patent No. 5,953,017, which is attributed

to Beach et al. (and hereafter referred to as "Beach"). As described above, Chasen teaches a

method like that recited in claim 1, whereby a user interface displays the hierarchy of an attribute

in a tree format for the purpose of applying values to objects represented in the hierarchy.

Chasen discloses that the user may modify a node within the hierarchy, such as changing a node

having a value of "Pop" to "Rock," for example (see column 4, line 65 – column 5, line 6). In

response, all the nodes hierarchically organized under the changed node are modified to reflect

the changed value (see column 4, line 65 – column 5, line 6). It is further understood that the

user may designate "rebel" members, like defined in claim 6, by similarly changing the value of

a node further down the hierarchy. As shown in figure 1 the tree, designated by reference

number 122, may comprise "+" and/or "-" icons in order to expand and/or contract each subtree

within the tree; the entire tree is hidden except the root node, i.e. the dominant ancestor, the root

nodes of any contracted subtree, and the direct ancestors of these root nodes. Accordingly, the

user may generate a summary view hiding various members of the tree, but, since the user is

limited to expanding and contracting subtrees, the user cannot display a particular node, such as

that representing a rebel member, while at the same time hiding all siblings of the node. Thus

user thus cannot generate a summary view like recited in claim 6, which hides *all* other members

except the highest hierarchical member identified as the dominant ancestor, rebel members to

whom the user applied values directly, and direct ancestors of rebel members.

Like Chasen, Beach discusses displaying a hierarchical organization of objects via a tree

view, in which the user may expand or contract each subtree within the tree (for example, see

column 1, lines 4-48; and column 5, line 49 – column 6, line 5). Beach further teaches that

siblings in such a tree may be "compressed," so that a particular node may be displayed while at

the same time siblings of this node are hidden (for example, see column 1, line 66 – column 3,

line 8; and column 6, lines 6-48).

It would have been obvious to one of ordinary skill in the art, having the teachings of

Chasen and Beach before him at the time the invention was made, to modify the tree taught by

Chasen, so that siblings of a particular node such as a rebel node may be hidden, like done by

Beach, and so thus the user may generate a summary view which hides all other members except

the highest hierarchical member, rebel members to whom the user applied values directly, and

direct ancestors of rebel members. It would have been advantageous to one of ordinary skill to

utilize this combination because such a tree view, with the ability to hide nodes of a sibling node,

better allows the user to maintain an orientation within the tree, even when the number of objects

within the tree is large, as is demonstrated by Beach (for example, see figures 4 and 5; and their

associated description in column 5, line 49 – column 6, line 48).

Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered

pertinent to applicant's disclosure. The applicant is required under 37 C.F.R. §1.111(C) to

consider these references fully when responding to this action. The Roberge et al. U.S. Patent

cited therein teaches a method, similar to that of claim 1, whereby a tree is displayed so that a

user may apply values to objects represented by nodes of the tree. The Palevich U.S. Patent cited

therein teaches displaying a tree, whereby like recited in claim 4, values applied to objects are

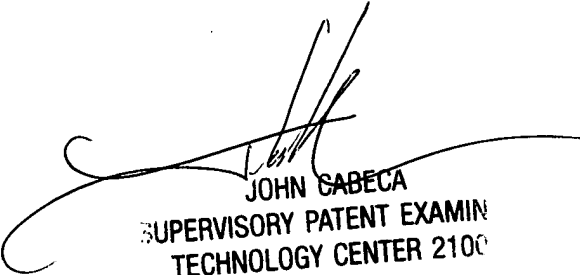propagated down the tree, and whereby the user may generate rebel members within the tree.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The

examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb

JOHN CABECA
SUPERVISORY PATENT EXAMIN
TECHNOLOGY CENTER 2100